[1]The Pulmonology and Allergy Clinic of Copenhagen, Copenhagen, Denmark, [2]Bispebjeg Hospital, Copenhagen, Denmark, [3]Private ENT practice Birkerød, Birkerød, Denmark, [4]GP, Humlebæk, Denmark, [5]ALK-Abello A/S, Hørsholm, Denmark, [6]Department of Business Studies, Aalborg, Denmark

OBJECTIVES: Grass pollen induced allergic rhinoconjunctivitis (ARC) constitutes a large burden for the society. The prevalence is increasing and up to 20% of the European and US populations suffer from respiratory allergies including grass pollen induced ARC. The majority of patients are treated with symptomatic medications; however a large proportion remains uncontrolled despite the use of such treatments. Specific immunotherapy (SIT) is the only treatment documented to target the underlying cause of the allergic disease leading to a sustained effect after treatment completion. The aim of this study was to compare the economic consequences of treatment of patients with ARC with a grass allergy immunotherapy tablet (AIT) and the clinical practice of subcutaneous immunotherapy (SCIT). **METHODS:** A cost-minimisation analysis (CMA) was applied comparing the SQ-standardised grass AIT (Grazax, Phleum pratense, 75,000 SQ-T/2,800 BAU, ALK, Denmark) with SCIT (Alutard, Phleum pratense, 100,000 SQ-U/ml, ALK, Denmark). The CMA included health care utilisation measured in physical units based on national guidelines, literature reviews and expert opinions, as well as valuation in unit costs based on drug tariffs, physician fee structures and wage statistics. The CMA was conducted from a Danish societal and health care perspective. **RESULTS:** Treating patients with ARC with the grass AIT instead of grass SCIT results in a significantly reduced number of physician visits leading to a total reduction in direct treatment costs, direct patient costs as well as in indirect costs of €3526 per patient during a treatment course. A one-way sensitivity analysis confirmed the robustness of these results. **CONCLUSIONS:** The cost minimisation analyse shows that grass AIT is a cost-saving alternative to SCIT when treating patients suffering from grass pollen induced ARC.

PRS11

BUDGET IMPACT ANALYSIS OF IMMUNOTHERAPY IN PATIENTS WITH BIRCH ALLERGIC RHINITIS

Westerhout KY[1], Verheggen BG[1], Schreder CH[2], Doering C[2], Reich K[3]
[1]Pharmerit International, Rotterdam, The Netherlands, [2]Stallergenes GmbH, Kamp-Lintfort, Germany, [3]Dermatologikum Hamburg, Hamburg, Germany

OBJECTIVES: A budget impact analysis was conducted to estimate the impact of Staloral Birch® on a market of selected number of relevant birch allergens. **METHODS:** The hypothetical market for birch allergens consisted of 3 compounds; Staloral Birch®, ALK Depot SQ® and SLITone®. Randomized controlled trials have been performed to estimate safety and efficacy of Staloral Birch® and ALK Depot SQ®; however, for SLITone® no comparable evidence-based information is available. Actual German market data from 2008-2010 served as a basis for future estimates of market share development. Future predictions were made on market uptake and market dynamics (i.e. which drug increases their market share at the expense of another drug). German drug acquisition costs were taken from the Lauer-Taxe; average annual treatment related costs have been extracted from a recent cost-effectiveness analysis for grass allergens. The analysis perspective was that of the German payer (i.e. Statutory Health Insurance). Three different scenario analyses were conducted over a 5-year time horizon. **RESULTS:** The total market budget in 2010 for these 3 therapies was estimated to be € 36,485,362. It decreased with €2,263,694 over a 5-year period in the first scenario, when the annual uptake of Staloral Birch® was set at +6.9% with market dynamics of 80%/20% (ALK Depot SQ®/SLITone®). These savings represent 1.2% of the cumulative reference budget varying from 0.4% in 2011 to 2.1% in 2015. In the second scenario market uptake for Staloral Birch® was varied from +2% to +8% annually. Accordingly, the budget was reduced by €656,143 to €2,624,573. In the final scenario, shifting market dynamics from 90%/10% to 70%/30% (ALK Depot SQ®/SLITone ®) showed a reduction of €136,675 to €4,390,713. **CONCLUSIONS:** Increasing Staloral Birch® market share was estimated to result in a stable, if not decreasing budget with more patients treated using an evidence-based compound.

PRS12

A BUDGET IMPACT ANALYSIS TO ESTIMATE THE ECONOMIC IMPACT OF BECLOMETHASONE/FORMOTEROL FOR THE TREATMENT OF MODERATE TO SEVERE PERSISTENT ASTHMA IN SIX SPANISH REGIONS

Darba J[1], Kaskens L[2]
[1]Universitat de Barcelona, Barcelona, Spain, [2]BCN Health, Barcelona, Spain

OBJECTIVES: To assess the economic impact of introducing beclomethasone/formoterol extrafine for the treatment of moderate to severe persistent asthma in six Spanish regions including Andalusia, Bask Country, Catalonia, Galicia, Madrid and Valencia. **METHODS:** A budget impact model was developed using the perspective of the Spanish regional healthcare services with a 5-year time horizon. The model was populated with regional data on disease prevalence, population growth, drug tariffs, healthcare resource utilization, unit costs and market shares. Drugs considered in the study were fluticasone/salmeterol, budesonide/formoterol and beclomethasone/formoterol extrafine. Costs considered included drug costs, diagnostic tests, physician visits, hospitalisation and adverse effects treatment costs. All costs referred to EUR 2010, using a 5% annual discount rate. Total annual healthcare costs were estimated based on mean costs per patient for each treatment before and after the introduction of beclomethasone/formoterol extrafine. **RESULTS:** Based upon the Spanish adult population data and asthma prevalence, the treated population with moderate to severe persistent asthma in 2010 was estimated at 110,346 in Andalusia, at 16,369 in the Bask Country, at 31,118 in Catalonia, at 30,506 in Galicia, at 21,800 in Madrid and at 37,316 in Valencia versus populations of 140,684, 19,893, 38,378, 37,753, 27,660 and 46,789 respectively in 2015. The annual mean cost per patient was €996 before the introduction of beclomethasone/formoterol extrafine and €990 after its introduction. Total annual health care costs over the next 5 years for all six regions range between €95,7 and €661,6 million for the Bask Country and Andalucia before the introduction of beclomethasone/formoterol extrafine and €95,1 and €657,9 million after its introduction, respectively. **CONCLUSIONS:** The introduction of beclomethasone/formoterol extrafine for the treatment of moderate to severe persistent asthma showed to reduce the budget impact for each of the regional health care services by showing net savings for all six regions over the next 5 years.

PRS13

SPECIFIC IMMUNOTHERAPY AND THE ECONOMIC IMPLICATIONS FROM THE PERSPECTIVE OF GERMAN STATUTORY HEALTH INSURANCE - A BUDGET-IMPACT MODELING APPROACH

Reinhold T[1], Willich SN[2], Brüggenjürgen BH[3]
[1]Charite University Medical Center Berlin, Germany, Berlin, Germany, [2]University Medicine Berlin, Charité, Berlin, Berlin, Germany, [3]University of Berlin, Berlin, Germany

OBJECTIVES: Specific immunotherapy (SIT) is the only potentially curative therapy in patients with allergic rhinitis (AR) and allergic asthma (AA). The present study examined the effects of specific immunotherapy (SIT) on the financial situation of the German statutory health insurance systems (SHI). **METHODS:** Taking population projections of the German Statistical Federal Office, the number of expected new cases (AR, AA) was calculated until 2050. Based on assumptions about the proportion of patients who received SIT in the future, age cohorts passed cost-effectiveness models that were based on Markov chains. For determining the cost situation of SIT remedies, we used selling prices for Allergovit® depot suspensions. All future costs are discounted at a rate of 2%. Data on effectiveness were extracted from published literature. The model calculation was supplemented by a Delphi panel and additional probabilistic sensitivity analysis. **RESULTS:** Based on the current situation, a total annual economic burden of € 1 billion is expected for care of patients with pollen-induced AR and AA in Germany. Several realistic scenarios have shown, that despite higher initial expenses, savings of up to 10% of the average total annual cost are realizable. That would mainly driven by a reduced number of patients suffering from AA. The size of this cost reduction is mainly affected by the starting point of therapy: If SIT is applied at an early disease stage without asthma symptoms, the expected number of asthma sufferers is up to 35% lower compared to status quo. **CONCLUSIONS:** From the perspective of statutory health insurance companies, SIT could be a useful strategic option to prevent future allergic disease cases and to reduce associated medical expenses.

PRS14

ESTIMATING THE BUDGET IMPACT OF INTRODUCING INDACATEROL IN THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) FROM THE PUBLIC PAYER PERSPECTIVE IN SÃO PAULO

Suzuki C[1], Silva NL[2]
[1]Novartis Biociências SA, São Paulo, Brazil, [2]Novartis Biociências SA, Sao Paulo, Brazil

OBJECTIVES: To estimate the budget impact of introducing indacaterol in the treatment of COPD over a 5-year time horizon in patients eligible for treatment with long-acting maintenance therapy. **METHODS:** An Excel-based budget impact model was developed to calculate the budget impact based on local epidemiological and drug costs data. The number of patients eligible for treatment with long-acting maintenance therapy was estimated considering: 1) the local adult population (>40 years old) of approximately 14.5 millions; 2) proportion of population using the public healthcare system services and medications around 77%; 3) prevalence of local COPD patients about 15.8%; 4) 18% of these patients are diagnosed and receiving treatment; 5) 1.05% of annual population growth rate; 6) the same patient distribution in each disease severity across all years was assumed as 64% of mild, 29% of moderate, 6% of severe and 1% of very severe; 7) only patients in moderate, severe and very severe groups were considered as eligible for treatment with long-acting maintenance therapy; and 8) 53% of annual treatment persistence rate was applied. The ex-factory price with 24.38% of discount was used for indacaterol costs and 5% of annual discount rate was applied on the costs. Indacaterol 150μg uptake was assumed to be: 10%, 15%, 20%, 23%, 25%, over 5 years consecutively. **RESULTS:** The number of patients eligible for treatment with long-acting maintenance therapy in São Paulo was estimated to be around 60,754 in the first year. The annual net budget impact of indacaterol was negative through the years around: -88K, -1.7M, -3.2M, -4.2M and -4.4M (BRL) consecutively. **CONCLUSIONS:** The budget impact results show that indacaterol has potential to reduce costs on the budget of State health care system.

PRS15

ESTIMATING THE BUDGET IMPACT OF INTRODUCING INDACATEROL IN THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) FROM THE BRAZILIAN PUBLIC HEALTH CARE SYSTEM (SUS) PERSPECTIVE

Suzuki C[1], Silva NL[2]
[1]Novartis Biociências SA, São Paulo, Brazil, [2]Novartis Biociências SA, Sao Paulo, Brazil

OBJECTIVES: To estimate the budget impact of introducing indacaterol in the treatment of COPD over a 5-year time horizon in patients eligible for treatment with long-acting maintenance therapy. **METHODS:** An Excel-based budget impact model was developed to calculate the budget impact based on local epidemiological and drug costs data. The number of patients eligible for treatment with long-acting maintenance therapy was estimated considering: 1) the local adult population (>40 years old) of approximately 61 millions; 2) proportion of population using the public healthcare system services and medications around 77%; 3) prevalence of local COPD patients about 15.8%; 4) 18% of these patients are diagnosed and receiving treatment; 5) 1.05% of annual population growth rate; 6) the same patient distribution in each disease severity across all years was assumed as 64% of mild,